Boeing and Airbus are set to face diverging credit outlooks after flying through recovery by Ng Ziyan Derlyn

- The NUS-CRI 1-year PD demonstrates the converging credit profiles of Boeing and Airbus stemming from increasing orders and revenues due to air-travel recoveries
- The NUS-CRI Forward 1-year PD highlights the diverging credit outlooks for Boeing and Airbus on the back of differences in leverage and profit-generating abilities

The <u>demand for airplanes</u> has swelled, as countries reopen and air travel resumes over the past few months. Coupled with a <u>surge in e-commerce</u>, the resultant rise in freight aircraft orders has been a silver lining for the industry that was heavily impacted by the pandemic. Aerospace Original Equipment Manufacturers (OEMs) Boeing Co. (Boeing) and Airbus SE (Airbus), which constitute <u>90% of equipment manufacturing in the commercial airplane industry</u>, have witnessed an improvement in their revenue-generating capabilities driven by this demand recovery. As such, the NUS-CRI 1-year Probability of Default (PD) demonstrates the improving credit profiles of both Boeing and Airbus since Jan-2021, with Boeing and Airbus crossing the BBB- Upper Bound and the BBB+ Upper Bound respectively. However, the NUS-CRI Forward 1-year PD (Forward PD¹) in Figure 1b demonstrates the diverging credit outlooks for Boeing and Airbus as Boeing is significantly more leveraged than Airbus, especially in the context of lower profit-generating abilities and a higher cost of borrowing.

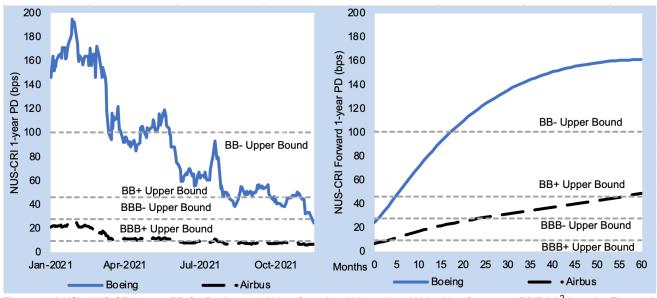


Figure 1a (LHS): NUS-CRI 1-year PD for Boeing and Airbus from Jan-2021 to Nov-2021 with reference to PDiR2.0² bounds. Figure 1b (RHS): NUS-CRI Forward 1-year PD for Boeing and Airbus as of Nov-2021 with reference to PDiR2.0 bounds. *Source: NUS-CRI*

Boeing and Airbus saw their credit risk fall this year on the back of improved operations. By Sep-2021, Boeing delivered 241 planes, while Airbus delivered 424 planes, compared to the 98 and 342 planes delivered in the first nine months of 2020 respectively. With the rapid expansion of global e-commerce due to the pandemic, global demand for cargo planes surged by 7.7% YoY in Aug-2021, creating an opportune environment for Boeing and Airbus as they launched new freight aircraft. This demand has been intensified by the current shipping backlog in the US, which has prompted higher demand for air cargo. In particular, Boeing, which currently

¹ The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similar to a forward interest rate. For example, the 6-month Forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 18 months, conditional on the firm's survival in the next 6 months.

² The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates.

provides more than 90% of global freight aircraft capacity³, has benefitted from the surge in demand, as reflected in its PD converging to almost the same levels as that of Airbus. From Q4 2020 to Q3 2021, both Boeing and Airbus saw their operating margins rebound to pre-pandemic levels, as shown in Figure 2b. Their stable current ratios also indicate sufficient short-term liquidity to meet their near-term liabilities (See Figure 2a).

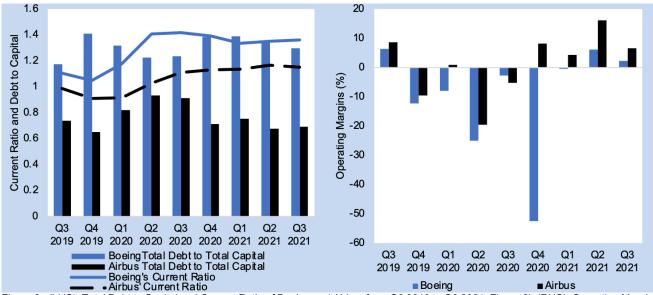


Figure 2a (LHS): Total Debt to Capital and Current Ratio of Boeing and Airbus from Q3 2019 to Q3 2021. Figure 2b (RHS): Operating Margin of Boeing and Airbus from Q3 2019 to Q3 2021. Source: Bloomberg

However, even with the improvements in operations and profitability, Boeing is still highly leveraged. Currently, Boeing has <u>USD 62.4bn</u> of debt outstanding, while Airbus has reported <u>USD 21.4bn</u> of outstanding debts. With more than triple the amount of debt than that of Airbus due over the next five years, Boeing faces more debt repayment pressure than Airbus (See Figure 3a). This translates to Boeing's current Debt-to-Capital of 1.29 is more than twice that of Airbus, underscoring its higher leverage (See Figure 2a). Presently, Boeing's cash burn rate amounts to <u>USD 507mn</u>⁴. Meanwhile, Airbus has <u>stopped burning cash since Q3 2020</u>, with free cash flows as of Q3 2021 totaling <u>USD 270mn</u>. Additionally, Airbus faces a significantly lower cost of borrowing than Boeing with the YTM for Airbus' bond even falling to the negative territory in Jul-2021 (See Figure 3b). In comparison, the higher cost of borrowing for Boeing makes it susceptible to larger default risks (See Figure 1b).

³ The global commercial plane industry consists of <u>commercial passenger planes and jetliners carrying freight</u>. While Airbus and Boeing have a duopoly in the global commercial plane industry, Boeing has a 90% share of the global freight aircraft segment, but only <u>35%</u> of the total global commercial plane industry, while Airbus constitutes 55%.

⁴ While Boeing's cash burn in Q3 2021 amounted to USD 507mn which is an improvement compared to the USD 705mn it burnt in the second quarter, Boeing received a USD 1.3bn tax refund. Otherwise, its cash burn would have been USD 1.8bn if not for the one-time benefit.

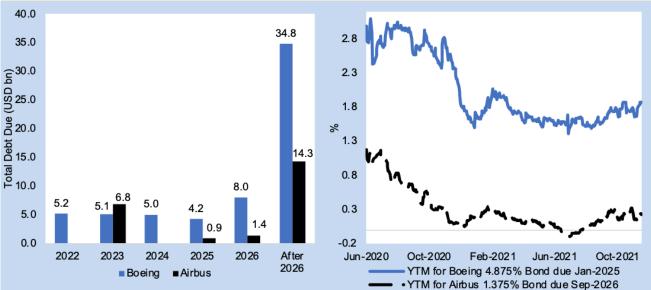


Figure 3a (LHS): Total Debt due by year for Boeing and Airbus in USD bn. Figure 3b (RHS): Yield to Maturity for Boeing and Airbus' bonds from Jun-2020 to Nov-2021. Source: Bloomberg

Following the <u>first major airshow</u> since the pandemic in Nov-2021, Airbus has raised operating profit targets for 2021 to <u>USD 5.2bn</u>, reflecting the rosy business conditions. In contrast, Boeing is still struggling with production issues of its 787 Dreamliners that are estimated to cost <u>USD 1bn</u>. To add to Boeing's woes, Airbus has just announced its <u>first order for its newly launched freight aircraft</u>, a segment that was once dominated by Boeing. The different business outlooks may influence their future profit-generating abilities and thus contribute to diverging credit outlooks (See Figure 1b).

Furthermore, potential investments may pose another risk for Boeing and Airbus. In Jun-2021, the US and Europe announced a 5-year suspension of 17-year trade tariffs between Airbus and Boeing due to threats stemming from China's Comac 6. As China's Comac C919 and Russia's MC-21 begin deliveries of commercial planes, Boeing and Airbus will see increasing competition, which may erode their long-standing duopoly in the global market in the long term, which is reflected by a worsening credit outlook for both Boeing and Airbus (See Figure 1b). The increased competition has led to a USD 15bn dilemma for Boeing as it contends with investing in new planes to raise its competitiveness. On the other hand, Airbus' planes would only require at most USD 3bn in upgrades to compete with Boeing and its new competitors. Hence, increasing competitiveness may lead to both Boeing and Airbus investing more cash into developments of their planes moving forward, hindering their debt repayment abilities, particularly Boeing's.

As a result of the supply chain crisis, Airbus has reckoned with the <u>late delivery of materials</u> and delayed production. For instance, in Oct-2021, Airbus delivered <u>36 planes</u>, which marks its lowest since Feb-2021. With <u>Boeing resuming production of its 737 Max</u>, the scarcity of materials will further cut into production and operations for the whole industry. The scarcity could also <u>bid up the price</u> for these materials which could increase costs of production for both Boeing and Airbus in the near term. Looking forward, Airbus announced plans to ramp up production of A320 neo jets from the current 45 to <u>75</u>⁷ a month in 2023, exceeding prepandemic production levels. On the other hand, Boeing continues struggling with production due to equipment defects, with the production of Dreamliners falling to <u>2/month</u> from the intended 5/month. This has led to Boeing losing out on more than <u>USD 25bn</u> worth of undelivered planes, with deliveries estimated to resume earliest by Mar-2022, slashing its cash flows.

Meanwhile, Boeing is inching closer to seeing China's two-year ban of its <u>737 Max being lifted</u> by next year, which could result in increased orders as China accounts for around <u>20%</u> of new deliveries⁸. Furthermore, with the conclusion of the COP26, more scrutiny will be placed on the emissions by the airline industry, which produces <u>12%</u> of carbon dioxide emissions from transport. Airbus outlines plans to develop a hydrogen-powered airliner with zero emissions by <u>2035</u>. Boeing also has plans to roll out planes that <u>fully run on sustainable fuels</u>

⁵ The last order for Airbus' cargo aircraft was back in <u>2015</u>. Previously, Airbus had only one cargo aircraft but it has since developed new freight aircraft.

⁶ Instead of imposing tariffs on Airbus and Boeing, the US and Europe are working towards cooperation to phase out competition.

⁷ Despite the fact that Airbus has not yet raised production levels to 75, it is already encountering criticism by two of the world's top aircraft leasing businesses, <u>Avolon and AerCap</u>, that its aggressive intentions to ramp up production are unjustified given the low demand from airlines.

⁸ Around one third of the undelivered 737 Max Airplanes have been stored for the China market.

by 2030. However, with a large debt burden, <u>investments to improve its competitiveness</u> would prove difficult for Boeing. Moreover, the global supply chain crisis could prove to be a double-edged sword for Boeing and Airbus. While it increases the demand for freight aircrafts, it also <u>hampers production of planes</u>, cutting into their operations and resulting in missed cash flows. However, replacement demand for Boeing and Airbus is estimated to constitute <u>40% and 45%</u> of future deliveries respectively. Combined with the fact that <u>20-25% of aircrafts</u>⁹ are expected to retire every five years, Airbus and Boeing are anticipating a steady flow of demand, which may bode well for their profits and partly soothe their credit risks.

 9 Previously, around $\underline{15\%}$ of the fleet retired every five years. Since the 9/11 crisis, the number increased to 20%. Future projections see 20-25% of the fleet retiring every five years, boosting demand for more fleets.

Credit News

China Evergrande sells entire stake in streaming platform HengTen to ease debt burden

Nov 18. China Evergrande Group would report a HKD 8.5bn loss after selling its 18% stake in the streaming services platform HengTen Network Group. The distressed company would raise HKD 2.13bn from this sale to help Evergrande avoid defaulting on its debts. Evergrande agreed to sell its 1.66bn HengTen shares at a 24% discount at HKD 1.28 per share. Evergrande, who has been struggling to meet deadlines for its debt repayments, has yet to meet its obligations of USD 82.5mn due on Dec.6 after which the 30-day grace period expires. Furthermore, Evergrande still has a further USD 255mn in coupon payments due on Dec. 28. Other Chinese property developers, among them Country Garden Services Holdings and Sunac China, have also started raising capital through equity and convertible bonds as the offshore bond market dries up due to contagion fears. (CNA)

Chinese developer Yango agrees to a bond swap with investors

Nov 19. Yango, a Chinese developer on the verge of default, has been approved for a debt exchange that allows postponed payment. Yango Group Co. sought overseas investors earlier this month to exchange USD 747mn in dollar debt for new bonds, which helps avoid immediate payment defaults and potential broader restructuring. In the upcoming days, the company's Yango Justice International Ltd. unit will issue new debt, with the face value of USD 669.9mn, a coupon of 10.25%, and maturity in Sep 2022. In addition, investors would get USD 25 in cash for every USD 1000 in the face value of bonds exchanged. This transaction relieves the short-term repayment obligations of Yango Group. On Friday, the bid price of a Yango Justice International bond due in 2024 was 27 cents, slightly higher than a low of 22 cents earlier. (WSJ)

Muni bond prices rally after infrastructure bill leaves out market

Nov 16. Municipal bond prices rallied over the past two weeks as investors abandoned hopes for a flurry of new bonds from Congress's USD 1tn investment in U.S. infrastructure. The yield on a 10-year tax-exempt triple-A muni bond has fallen 8% as prices rise. The municipal market has largely been excluded from the infrastructure package signed on Monday, disappointing investors looking to buy new bonds and local governments trying to manage their debt loads. However, in the long term, any investment in roads, sewers, and trains is generally seen as a positive for the market since it helps boost municipal credit. The USD 1tn package could also eventually lead to more bond issuance as some projects will receive only partial federal support, and states and cities will need to pay for the rest. (WSJ)

China junk-bond bargain hunters trigger 388% surge in ETF assets

Nov 21. One ETF tracking Asian junk bonds have seen assets climb by 385% from the end of August, showing how investors are increasingly confident on Chinese property junk bond rebound. Surging Chinese dollar junk bonds yield keeps attracting worldwide investors, and the government's effort to limit contagion in the property sector boosts market confidence. However, this trend may be turning, and investors are becoming more cautious. Chinese dollar junk bonds yield fell to about 20% after reaching the peak of almost 25% on Nov. 9. Meanwhile, widespread default concerns by developers may have subsided after the meeting held by authorities, especially as the government seeks to ease funding conditions for higher-rated property firms to fine-tune a crackdown on the industry and avoid systemic risks. However, risks still remain as the industry faces contracting profit margins amidst large debt dues. (Bloomberg)

Private lenders ratchet up risk as they fight for business

Nov 17. Private credit funds are taking up more risks by relaxing the covenants on their loans in order to win more lending business. The number of covenant-lite loans - loans that give lenders fewer options to trigger bankruptcies or restructurings of distressed companies - have increased by 10% since last year, while loans with two covenants, which are safer for lenders, have fallen from 50% to 30% in the same period. In the private credit market, creditors are exposed to a larger potential loss as they hold onto the loans, meaning that the risks are not shared with other creditors. Firms are aiming for a potential yield of 8 percentage points, which they achieve through offering easier covenants instead of lowering the rates charged to the companies. (Bloomberg)

China property moguls use billions of their own cash on rescues (Bloomberg)

World's biggest shipping company makes history with green bond (Bloomberg)

U.S. Investment-grade bond supply to slow ahead of holidays (Bloomberg)

Regulatory Updates

China's central bank signals easing as economic growth slows

Nov 22. China's central bank signaled possible easing measures to aid the economy's recovery as growth weakens. In its latest quarterly monetary policy report, the People's Bank of China removed a few key phrases cited in previous reports in its policy outlook, which economists believe suggests a shift in stance towards more supportive monetary policy, and more decisive monetary and credit easing. Any easing would likely be targeted toward small businesses and green finance, similar to recent PBOC measures, including CNY 200bn of financing for coal projects announced last week. The PBOC reiterated it will not use the property market to stimulate growth and will maintain the stable development of the market, suggesting an increasing possibility of marginal structural easing in the coming months. On the yuan's exchange rate, the PBOC said it will enhance expectation management, guide small businesses to better manage operational and credit risks, and develop the offshore yuan market, suggesting gradual allowances for a more flexible currency. (Bloomberg)

Fed may need to consider faster taper, officials say

Nov 20. United States' personal consumption expenditure price index increased in Sept 2021 (4.4% YoY) and was well above the central bank's 2% target. With the rapid recovery in the labor market and the deterioration of inflation data, the Fed may need to consider faster tapering and getting rid of near-zero interest rates. The Federal Open Market Committee has begun to slow down its monthly asset purchases and is expected to complete this process by mid-2022. On the day the above signal was released, the key part of the U.S. Treasury yield curve flattened to the tightest level of the day. Meanwhile, the Fed is paying close attention to the data obtained between now and the next policymakers meeting in December. The challenge of adjusting monetary policy will be the key challenge looking forward. (Bloomberg)

SEBI considers using market makers for Indian corporate bonds (Mint)

Markets look to February for next turning point in BOE rate bets (Bloomberg)

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